

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended): A wireless communication apparatus comprising:
a transceiving unit for receiving and transmitting data; and
a controller,
~~for analyzing wherein the controller analyzes~~ a destination of a packet received for a certain period of time, ~~detecting~~ ~~detects~~ an amount of slot usage according to the destination and increases a number of slots in a destination device based on the packet destination, selecting selects a temporary master device according to the amount of slot usage, and ~~transferring~~ transfers a role of master to the selected temporary master device.
2. (Original): The wireless communication apparatus of claim 1, comprising a memory for storing the amount of slot usage of the wireless communication apparatus.
3. (Original): The wireless communication apparatus of claim 1, wherein the wireless communication apparatus is operated as a master device.
4. (Original): The wireless communication apparatus of claim 1, wherein the controller selects the temporary master device that corresponds to the destination having the largest amount of slot usage.

5. (Original): A wireless communication apparatus of claim 1, wherein the controller continuously acts as a master device for a certain period of time if the controller has the largest amount of slot usage.

6. (Original): The wireless communication apparatus of claim 1, wherein the controller is connected to a host via a communication interface.

7. (Currently amended): A wireless communication system comprising:
a master device for analyzing a destination of a packet, detecting an amount of slot usage according to the destination and increasing a number of slots in a destination device based on the packet destination, selecting a temporary master device according to the amount of slot usage, and transferring a role of master to the selected temporary master device; and
at least one slave device connected with the master device, wherein if the at least one slave device is selected as the temporary master device, the at least one slave device taking takes the role of master from the master device and ~~acting~~ acts as the temporary master device for a predetermined period of time.

8. (Original): The wireless communication system of claim 7, wherein the master device selects the temporary master device that corresponds to a destination having the largest amount of slot usage.

9. (Original): The wireless communication system of claim 7, wherein the master device continuously maintains the role of master device for the predetermined period of time if the master device is the device that has the largest amount of slot usage.

10. (Currently amended): A control method of a wireless communication system having a master device and at least one slave device connected with the master device, the method comprising ~~the steps of~~:

(a) the master device, analyzing a packet received for a period of time and detecting an amount of slot usage according to a destination;

the master device increasing a number of slots in a destination device based on the packet destination; and

(b) the master device, selecting a temporary master device according to the amount of slot usage and transferring a role of master to the selected temporary master device.

11. (Currently amended): The control method of claim 10, wherein ~~the step (b) selecting a temporary master further~~ comprises selecting the temporary master device that corresponds to a destination having the largest amount of slot usage.

12. (Currently amended): The control method of claim 10, wherein the master device continuously maintains the role of master device for a certain period of time if the master device is the device that has the largest amount of slot usage ~~in the step (b)~~.

13. (Currently amended): A control method of a wireless communication system having a master device and at least one slave device connected with the master device, the method including:

(a) ~~having the master device operable to analyze~~ analyzing a packet received for a period of time and detecting an amount of slot usage according to a destination;

the master device increasing a number of slots in a destination device based on the packet destination; and

(b) the master device selecting a temporary master device according to the amount of slot usage and transferring a role of master to the selected temporary master device.

14. (Currently amended): The control method of claim 13, wherein ~~(b) the master device selecting a temporary master further~~ comprises selecting the temporary master device that corresponds to a destination having the largest amount of slot usage.

15. (Currently amended): The control method of claim 13, wherein the master device is operable to continuously maintain the role of master for said period of time if the master device is the device that has the largest amount of slot usage ~~in (b)~~.

16. (Original): A wireless communication method for selecting a temporary master device, the wireless communication method comprising the steps of:

(a) initializing a number of slot usage according to slave devices and a switching period;

(b) receiving a packet from the slave devices connected to a Piconet, and increasing the number of slot usage according to a destination recorded in the packet;

(c) determining whether or not a switching period has passed as wireless communication apparatuses mutually send/receive a plurality of packets;

(d) selecting a certain device which has the largest number of slot usage and making the certain device a temporary master device; and

(e) determining whether or not the certain device, selected to be the temporary master device, is a current master.

17. (Original): The wireless communication method of claim 16, wherein if it is determined that the certain device selected to be the temporary master device is a current master, steps (a) through (e) are repeated.

18. (Original): The wireless communication method of claim 16, wherein if it is determined that the certain device selected to be the temporary master device is not a current master, transferring a role of master from a master device to the temporary master device through master-slave switching.